







**Rotary brush device and vacuum cleaner using the same**

**Patent number:** EP0947155  
**Publication date:** 1999-10-06  
**Inventor:** NISHIMURA HIROSHI (JP); HAYASHI SEIZO (JP)  
**Applicant:** MATSUSHITA ELECTRIC IND CO LTD (JP)  
**Classification:**  
- international: A47L9/04; A47L5/30; A47L9/28  
- european: A47L9/28B2, A47L9/28B4, A47L9/04, A47L5/28, A47L5/30, A47L9/02, A47L9/28, A47L9/28B  
**Application number:** EP19990106662 19990401  
**Priority number(s):** US19980055020 19980403

**Also published as:**

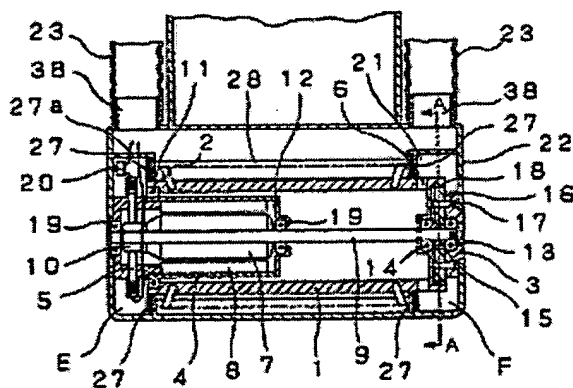
 EP0947155 (A3)

**Cited documents:**

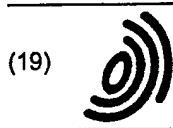
 GB370645  
 GB293319  
 GB668631  
 US3172138  
 US4384386  
more >>

**Abstract of EP0947155**

A motor is incorporated in a cylindrical body which is a rotary brush. Rotation of a rotor of the motor, directly or via a speed reduction mechanism, drives the rotary brush. Cooling air runs through the cylindrical body so that the motor is cooled and protected. The rotary brush and an electric apparatus using the rotary brush can be downsized and easily.



Data supplied from the **esp@cenet** database - Worldwide



(19)

Europäisches Patentamt

European Patent Office

Office européen des brevets



(11)

EP 0 947 155 A3

(12)

## EUROPEAN PATENT APPLICATION

(88) Date of publication A3:  
20.02.2002 Bulletin 2002/08

(51) Int Cl.<sup>7</sup>: A47L 9/04, A47L 5/30,  
A47L 9/28

(43) Date of publication A2:  
06.10.1999 Bulletin 1999/40

(21) Application number: 99106662.2

(22) Date of filing: 01.04.1999

(84) Designated Contracting States:  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU  
MC NL PT SE  
Designated Extension States:  
AL LT LV MK RO SI

(72) Inventors:  
• Nishimura, Hiroshi  
Gamo-gun, Shiga 529-1535 (JP)  
• Hayashi, Seizo  
Omihachiman-shi, Shiga 523-0892 (JP)

(30) Priority: 03.04.1998 US 55020

(74) Representative: Kügele, Bernhard et al  
NOVAPAT INTERNATIONAL SA, 9, Rue du Valais  
1202 Genève (CH)

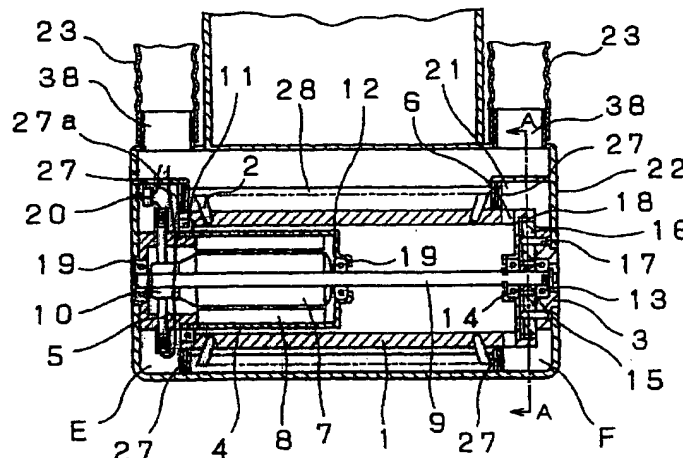
(71) Applicant: Matsushita Electric Industrial Co., Ltd.  
Kadoma-shi, Osaka 571-8501 (JP)

(54) Rotary brush device and vacuum cleaner using the same

(57) A motor is incorporated in a cylindrical body which is a rotary brush. Rotation of a rotor of the motor, directly or via a speed reduction mechanism, drives the

rotary brush. Cooling air runs through the cylindrical body so that the motor is cooled and protected. The rotary brush and an electric apparatus using the rotary brush can be downsized and easily.

Fig. 2



EP 0 947 155 A3